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TECHNICAL NOTES

LAKE STATES FOREST EXPERIMENT STATION
UNIVERSITY FARM ST. PAUL, MINNESOTA

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Thinned Stands Fill Up Rapidly

In the fall of 1929, the Station established a series of permanent plots to study the effect of various degrees of thinning on growth and production of merchantable wood in young jack pine. Thinnings were made in an overstocked stand of 20-year-old jack pine located on medium to good site in the Chippewa National Forest. The smaller trees were the ones generally removed from all stands.

Plot No. 29 was left unthinned.

" " 28 was thinned out to 89 percent of normal basal area.
" " 30 was thinned out to 77 percent of normal basal area.
" " 26 was thinned out to 62 percent of normal basal area.
" " 27 was thinned out to 40 percent of normal basal area.

Last fall, or 10 years since the establishment, the plots were re-measured. All plots showed very good response to thinning. The most striking was the growth in total basal area, or the total cross-sectional area of trees at breast height. As shown in the accompanying table, the lightly thinned plots have already surpassed the normal basal area, medium thinning almost reached normal, and the heavily thinned plot, growing the fastest, is approaching the goal rapidly by having more than doubled its residual basal area in 10 years.

Growth in Basal Area per Acre

Plot number	Basal area per acre		Percent of normal		The rate of growth per year
	After thinning	10 years later	After thinning	10 years later	
	Sq. ft.	Sq. ft.	Percent	Percent	Percent
29.....	100.8	138.8	109	112	3.8
30.....	80.3	128.6	89	106	6.0
28.....	67.6	121.6	77	103	8.0
26.....	53.6	114.2	62	98	11.3
27.....	36.1	92.7	40	78	15.7

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